

CLAIMS:

1. A method for displaying a sub-picture over a background picture on an electronic reading device, the method comprising:
 - 5 determining a visual characteristic of at least a portion of the background picture (800, 810);
 - determining a visual characteristic of at least a portion of the sub-picture (900); and
 - 10 determining a position for displaying the sub-picture (900) so that the at least a portion of the background picture (800, 810) and the at least a portion of the sub-picture (900) are separated when the visual characteristics thereof differ by less than a threshold difference.
2. The method of claim 1, wherein:
 - 15 the visual characteristics comprise color levels.
3. The method of claim 1, wherein:
 - the visual characteristics comprise greyscale levels.
4. The method of claim 1, wherein:
 - 20 the at least a portion of the background picture comprises information that is associated with information of the at least a portion of the sub-picture.
5. The method of claim 1, wherein:
 - 25 determining the position for displaying the sub-picture comprises determining visual characteristics of different regions (1110) of the background picture until at least one of the regions is located whose visual characteristic differs from the visual characteristic of the at least a portion of the sub-picture by more than the threshold difference.
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6. A display comprising:
 - at least one picture element (2) disposed on a display panel (1);

a control (100) comprising an addressing circuit (105) electrically connected to apply differences in electrical potential to the at least one picture element (2);

wherein the control (100) further comprises a computer program of
5 instructions to cause the control (100) to determine a visual characteristic of at least a portion of a background picture (800, 810) and a visual characteristic of at least a portion of a sub-picture (900), and to determine a position for displaying the sub-picture (900) on the display panel (1) to separate the at least a portion of the background picture (800, 810) and the at least a portion of the sub-picture (900) when
10 the visual characteristic thereof differ by less than a threshold difference; and
the control (100) being configured to cause the addressing circuit (105) to apply one or more of said differences in electrical potential to the at least one picture element (2) to display the sub-picture (900) in the determined position.

15 7. The display of claim 6, further comprising:
a memory (120) storing data indicating the visual characteristic of the at least a portion of the background picture;
wherein the control (100) further determines the position for displaying the sub-picture responsive to the data stored in the memory.

20 8. The display of claim 6, wherein the visual characteristics comprise color levels.

9. The display of claim 6, wherein the visual characteristics comprise
25 greyscale levels.

10. The display of claim 6, wherein the at least one picture element (2) comprises an electrophoretic display.

30 11. An electronic reading device comprising the display of claim 6.

12. A sign comprising the display of claim 6.

13. The sign of claim 12 wherein the sub-picture (900) comprises a message or image which changes rapidly.

14. A method for displaying a sub-picture (1350) over a background picture (1300) on an electronic reading device, the method comprising:
5 determining a visual characteristic of at least a portion of the background picture (1300);
determining a visual characteristic of at least a portion of the sub-picture (1350); and
10 displaying the at least a portion of the sub-picture over the at least a portion of the background picture with a transition region (1310, 1320) therebetween in accordance with the visual characteristics thereof.

15. The method of claim 14, wherein:
15 the transition region has a visual characteristic that is between the visual characteristic of the at least a portion of the background picture and the visual characteristic of the at least a portion of the sub-picture.

16. The method of claim 14, further comprising:
20 estimating the visual characteristic of the at least a portion of the background picture.

17. The method of claim 14, further comprising:
measuring the visual characteristic of the at least a portion of the background
25 picture.

18. The method of claim 14, wherein the transition region comprises one of a dithered and grey scaled pattern.

19. The method of claim 14, wherein the visual characteristics comprise at least one of color levels and greyscale levels.

20. The method of claim 14, wherein:

the at least a portion of the sub-picture is displayed over the at least a portion of the background picture when the visual characteristic of the at least a portion of the background picture differs from the visual characteristic of the at least a portion of the sub-picture region by less than a threshold difference.

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21. A display comprising:
an array of picture elements (2) disposed on a display panel (1);
a control (100) comprising an addressing circuit (105) electrically
connected to apply differences in electrical potential to the picture elements (2); and
10 wherein the control (100) further comprises a computer program
configured to cause the control (100) to determine a visual characteristic of at least a
portion of a background picture (1300) and a visual characteristic of at least a portion
of a sub-picture (1350), and to determine a transition region between the at least a
portion of the background picture (1300) and the at least a portion of the sub-picture
15 (1350) according to the visual characteristics thereof;

the control (100) being configured to cause the addressing circuit (105)
to apply a set of said differences in electrical potential to a portion of the picture
elements (2) to display the sub-picture (1350) with the determined transition region
(1310, 1320).

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22. An electronic reading device comprising the display of claim 21.

23. A sign comprising the display of claim 21.

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24. The sign of claim 23 wherein the sub-picture (1350) comprises a
message or image which changes rapidly.

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25. A computer program product for displaying a sub-picture over a
background picture on a bi-stable display, the computer program product comprising:
computer code devices configured to cause a computer to determine a visual
characteristic of at least a portion of a background picture (1300) and a visual
characteristic of at least a portion of a sub-picture (1350), and to display the at least a
portion of the sub-picture (1350) over the at least a portion of the background picture
(1300) in a position determined in accordance with the visual characteristics thereof

or with a transition region (1310, 1320) between the at least a portion of the sub-picture (1350) over the at least a portion of the background picture (1300) determined in accordance with the visual characteristics thereof.